

WHAT IS CLAIMED IS:

1                   1.     A method for identifying a compound that modulates angiogenesis,  
2     the method comprising the steps of:

3                   (ii) contacting the compound with a ILKAP polypeptide, the polypeptide  
4     encoded by a nucleic acid that hybridizes under stringent conditions to a nucleic acid  
5     encoding a polypeptide comprising an amino acid sequence of SEQ ID NO:2; and  
6                   (ii) determining the functional effect of the compound upon the ILKAP  
7     polypeptide.

1                   2.     The method of claim 1, wherein the functional effect is determined  
2     *in vitro*.

1                   3.     The method of claim 2, wherein the functional effect is a physical  
2     effect.

1                   4.     The method of claim 2, wherein the functional effect is determined  
2     by measuring ligand binding to the polypeptide.

1                   5.     The method of claim 2, wherein the functional effect is a chemical  
2     effect.

1                   6.     The method of claim 5, wherein the functional effect is determined  
2     by measuring phosphatase activity of the polypeptide.

1                   7.     The method of claim 1, wherein the polypeptide is expressed in a  
2     eukaryotic host cell.

1                   8.     The method of claim 7, wherein the functional effect is a physical  
2     effect.

1                   9.     The method of claim 8, wherein the functional effect is determined  
2     by measuring ligand binding to the polypeptide.

1                   10.    The method of claim 1, wherein the functional effect is a chemical  
2     or phenotypic effect.

1 11. The method of claim 11, wherein the polypeptide is expressed in a  
2 eukaryotic host cell.

1 12. The method of claim 11, wherein the host cell is an endothelial  
2 cell.

1 13. The method of claim 12, wherein the functional effect is  
2 determined by measuring avb3 expression, haptotaxis, or phosphatase activity.

1 14. The method of claim 1, wherein modulation is inhibition of  
2 angiogenesis.

1 15. The method of claim 1, wherein the polypeptide is recombinant.

1 16. The method of claim 1, wherein the polypeptide comprises a  
2 sequence of SEQ ID NO:2.

1 17. The method of claim 1, wherein the compound is an antibody.

1 18. The method of claim 1, wherein the compound is an antisense  
2 molecule.

1 19. The method of claim 1, wherein the compound is a small organic  
2 molecule.

1 20. A method of modulating angiogenesis in a subject, the method  
2 comprising the step of administering to the subject a therapeutically effective amount of a  
3 compound identified using the method of claim 1.

1 21. The method of claim 20, wherein the subject is a human.

1 22. The method of claim 20, wherein the compound is an antibody.

1 23. The method of claim 20, wherein the compound is an antisense  
2 molecule.

1 24. The method of claim 20, wherein the compound is a small organic  
2 molecule.

1                   25.    The method of claim 20, wherein the compound inhibits  
2    angiogenesis.

1                   26.    A method of modulating angiogenesis in a subject, the method  
2    comprising the step of administering to the subject a therapeutically effective amount of a  
3    ILKAP polypeptide, the polypeptide encoded by a nucleic acid that hybridizes under  
4    stringent conditions to a nucleic acid encoding a polypeptide comprising an amino acid  
5    sequence of SEQ ID NO:2.

1                   27.    A method of modulating angiogenesis in a subject, the method  
2    comprising the step of administering to the subject a therapeutically effective amount of a  
3    nucleic acid encoding a ILKAP polypeptide, wherein the nucleic acid hybridizes under  
4    stringent conditions to a nucleic acid encoding a polypeptide comprising an amino acid  
5    sequence of SEQ ID NO:2.

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